

=> FILE REG

FILE 'REGISTRY' ENTERED ON 23 JUL 2008
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'HCAPLUS' ENTERED ON 23 JUL 2008

L1 1123 S BASSET ?/AU
L2 205 S BRES ?/AU
L3 115 S COPERET ?/AU
L4 83614 S MARTIN MAUNDERS ?/AU OR MAUNDERS MARTIN ?/AU OR MARTIN
L5 43 S SOULIVONG ?/AU
L6 145 S TAOUFIK ?/AU
L7 188 S THIVOLLE CAZAT ?/AU OR CAZAT THIVOLLE ?/AU OR THIVOLLE
L8 1 S L1 AND L2 AND L3 AND L4 AND L5 AND L6 AND L7
SEL RN

FILE 'REGISTRY' ENTERED ON 23 JUL 2008

L9 5 S E1-E5
SEL L9 5 RN
L10 1 S E6
SEL L9 4 RN
L11 1 S E7
SEL L9 1-2 RN
L12 2 S E8-E9

FILE 'HCA' ENTERED ON 23 JUL 2008

L13 7305 S L11/P
L14 27094 S L10 (L) RACT/RL
L15 84 S L12
L16 1356 S L13 AND L14
L17 5 S L16 AND L15

FILE 'REGISTRY' ENTERED ON 23 JUL 2008

L18 47487 S (C (L) H (L) M)/ELS (L) 3/ELC.SUB
L19 9460 S L18 AND NO RSD/FA
L20 2115664 S H/ELS AND (A2 OR T1 OR T2 OR T3 OR B2)/PG
L21 3036 S L19 AND L20

FILE 'HCA' ENTERED ON 23 JUL 2008

L22 16762 S L21

FILE 'REGISTRY' ENTERED ON 23 JUL 2008

L23 2811 S L20 (L) 2/ELC.SUB
L24 4827 S (M (L) H)/ELS (L) 2/ELC.SUB

FILE 'HCA' ENTERED ON 23 JUL 2008

L25 12806 S L23
L26 28595 S L24
L27 6 S L16 AND L22
L28 1 S L16 AND L25
L29 1 S L16 AND L26
L30 138366 S L18
L31 9 S L16 AND L30
L32 9 S L17 OR L27 OR L28 OR L29 OR L31
L33 6 S 1840-2003/PY,PRY,AY AND L32

=> FILE HCA

FILE 'HCA' ENTERED ON 23 JUL 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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=> D L33 1-6 BIB ABS HITSTR HITIND

L33 ANSWER 1 OF 6 HCA COPYRIGHT 2008 ACS on STN
AN 141:297659 HCA Full-text
TI Metal compound fixed on a support, preparation process, and use of
the compound in hydrocarbon metathesis reactions
IN Basset, Jean Marie; Coperet, Christophe; Soulivong, Daravong;
Taoufik, Mostafa; Thivolle, Cazat Jean
PA BP Lavera SNC, Fr.
SO Fr. Demande, 35 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	FR 2852866	A1	20041001	FR 2003-3588	200303 25
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	FR 2852866	B1	20060714		

WO 2004089541 A2 20041021 WO 2004-FR730 200403
24

WO 2004089541 A3 20041118 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG

EP 1603852 A2 20051214 EP 2004-742338 200403
24

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
PL, SK

CN 1795153 A 20060628 CN 2004-80014514 200403
24

US 20070129584 A1 20070607 US 2007-550628 200701
22

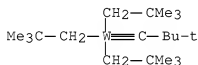
PRAI FR 2003-3588 A 20030325 <--
WO 2004-FR730 W 20040324

AB The present invention relates to a supported metal compd. comprising a support based on aluminum oxide on which is grafted a tungsten hydride. The support can be selected among the homogeneous supports in compn. based on aluminum oxide and among the heterogeneous supports based on aluminum oxide including aluminum oxide primarily on the surface of the aforesaid supports. The support can, in particular, be aluminum oxide, mixed aluminum oxides, and modified aluminum oxides, contg. one or more elements of Groups 15 to 17, such as phosphorus, sulfur, the fluorine or chlorine, of the Table of the Periodic Classification of the Elements. Preferably the support is porous, nonporous, or mesoporous alumina. The valence of tungsten can have a value going from 2 to 6; the tungsten atom is generally related to one or more hydrogen atoms and, optionally, one or more

hydrocarbon radicals. The compd. according to the invention can be prepd. by a stage of dispersion and grafting of an organometallic tungsten precursor on the support based on aluminum oxide, then by hydrogenolysis of the resulting product. The compd. according to the invention can be used as catalyst in reactions of scission and hydrocarbon recombination, in particular in reactions of hydrocarbon metathesis, in particular of alkane. It has a catalytic activity extremely high in this type of reaction, and, in particular, an increased selectivity in the formation of n-alkanes compared to that of isoalkanes. A typical catalyst was manufd. by hydrogenation of tris(neopentyl)neopentylidynetungstenon α -alumina support.

IT 68490-69-7DP, hydrogenated
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (tungsten hydride fixed on alumina-based supports for hydrocarbon metathesis reactions)

RN 68490-69-7 HCA
 CN Tungsten, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidyne)-, (T-4)-
 (CA INDEX NAME)



IT 74-84-0P, Ethane, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (tungsten hydride fixed on alumina-based supports for hydrocarbon metathesis reactions)

RN 74-84-0 HCA
 CN Ethane (CA INDEX NAME)



IT 74-82-3, Methane, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tungsten hydride fixed on alumina-based supports for hydrocarbon metathesis reactions)

RN 74-82-8 HCA
 CN Methane (CA INDEX NAME)

CH₄

IC ICM B01J031-12
ICS B01J032-00; B01J037-02; C07C006-02; C07C006-08; C07C002-66;
C07C002-58; C07C002-30
CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 67
IT 68490-69-7DP, hydrogenated
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP
(Preparation); USES (Uses)
(tungsten hydride fixed on alumina-based supports for hydrocarbon
metathesis reactions)
IT 74-84-0P, Ethane, preparation 106-97-8P, Butane,
preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(tungsten hydride fixed on alumina-based supports for hydrocarbon
metathesis reactions)
IT 74-82-8, Methane, reactions 74-98-6, Propane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(tungsten hydride fixed on alumina-based supports for hydrocarbon
metathesis reactions)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 2 OF 6 HCA COPYRIGHT 2008 ACS on STN
AN 140:17737 HCA Full-text
TI Process for conversion of methane into ethane
IN Basset, Jean Marie; Bres, Philippe; Coperet, Christophe; Maunders,
Barry; Souliovong, Daravong; Taoufik, Mostafa; Thivolle Cazat, Jean
PA BP Lavera, Fr.; BP Chemicals Limited
SO Fr. Demande, 31 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	FR 2840607	A1	20031212	FR 2002-7066	200206 10
				<--	
	CA 2488758	A1	20031218	CA 2003-2488758	200306

04

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WO 2003104171

A1

20031218

WO 2003-GB2426

200306

04

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003232934

A1

20031222

AU 2003-232934

200306

04

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EP 1511703

A1

20050309

EP 2003-727733

200306

04

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1659120

A

20050824

CN 2003-813419

200306

04

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US 20050272966

A1

20051208

US 2004-517212

200412

08

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PRAI FR 2002-7066

A

20020610

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WO 2003-GB2426

W

20030604

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OS CASREACT 140:17737

AB In the title process methane is brought to contact with a metal catalyst (lanthanides, actinides and Groups 2 to 12 metals) to form ethane at a yield of $\geq 65\%$ compared to the carbonaceous products formed in the process. The conversion of methane is carried out in particular by catalytic coupling, preferably not-oxidn. of methane. The catalyst can be advantageously selected among the metal hydrides and the organometallic compds. of metal preferably supported and in particular grafted on a solid support.

IT 74-84-6P, Ethane, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (process for manuf. of alkanes from one species to another
 species using hydrogenolyzed metal catalysts)

RN 74-84-0 HCA

CN Ethane (CA INDEX NAME)



IT 74-82-8, Methane, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (process for manuf. of alkanes from one species to another
 species using hydrogenolyzed metal catalysts)

RN 74-82-8 HCA

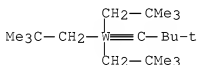
CN Methane (CA INDEX NAME)



IT 68490-69-7P
 RL: BYP (Byproduct); PREP (Preparation)
 (supported catalyst; process for manuf. of alkanes from one
 species to another species using hydrogenolyzed metal catalysts)

RN 68490-69-7 HCA

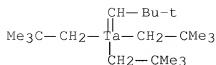
CN Tungsten, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidene)-, (T-4)-
 (CA INDEX NAME)



IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum
 RL: CAT (Catalyst use); USES (Uses)
 (supported catalyst; process for manuf. of alkanes from one
 species to another species using hydrogenolyzed metal catalysts)

RN 54294-45-0 HCA

CN Tantalum, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidene)-, (T-4)-
 (CA INDEX NAME)



IC ICM C07C009-06
ICS C07C002-76
CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 23, 67, 29, 78
IT 74-84-0P, Ethane, preparation
RL: IMF (Industrial manufacture); PREP (Preparation)
(process for manuf. of alkanes from one species to another
species using hydrogenolyzed metal catalysts)
IT 74-82-8, Methane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for manuf. of alkanes from one species to another
species using hydrogenolyzed metal catalysts)
IT 68490-69-7P
RL: BYP (Byproduct); PREP (Preparation)
(supported catalyst; process for manuf. of alkanes from one
species to another species using hydrogenolyzed metal catalysts)
IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum
RL: CAT (Catalyst use); USES (Uses)
(supported catalyst; process for manuf. of alkanes from one
species to another species using hydrogenolyzed metal catalysts)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 3 OF 6 HCA COPYRIGHT 2008 ACS on STN
AN 140:17736 HCA Full-text
TI Process for manufacture of alkanes from one species to another
species
IN Coperet, Christophe; Soulivong, Daravong; Maunders, Barry; Sunley,
Glenn; Dobson, Ian
PA BP Lavera, Fr.; BP Chemicals Limited
SO Fr. Demande, 65 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI FR 2840606 A1 20031212 FR 2002-7067 200206
10

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WO 2003104172 A1 20031218 WO 2003-GB2427 200306
04

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,
NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

AU 2003232358 A1 20031222 AU 2003-232358 200306
04

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PRAI FR 2002-7067 A 20020610 <--
WO 2003-GB2427 W 20030604 <--

OS CASREACT 140:17736

AB In the process such as metathesis or transformation, an initial alkane is set to contact with a metal catalyst (e.g., supported tris(neopentyl)(neopentylidene)tantalum) which has been activated (hydrogenolyzed) by the contact with a agent which can form in-situ H or/and a hydrocarbonyl radical. The initial alkanes can be selected among linear alkanes, branched alkanes and cycloalkanes substituted by at least a linear or branched chain alkane, and among the methane and of the mixts. of methane with one or more other initial alkanes.

IT 74-82-8, Methane, reactions

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(in-situ hydrogen former; process for manuf. of alkanes from one species to another species using hydrogenolyzed metal catalysts)

RN 74-82-8 HCA

CN Methane (CA INDEX NAME)

IT 74-84-6P, Ethane, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (process for manuf. of alkanes from one species to another
 species using hydrogenolyzed metal catalysts)

RN 74-84-0 HCA

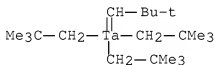
CN Ethane (CA INDEX NAME)



IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum
 68490-69-7
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical,
 engineering or chemical process); PROC (Process); USES (Uses)
 (supported catalyst; process for manuf. of alkanes from one
 species to another species using hydrogenolyzed metal catalysts)

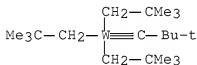
RN 54294-45-0 HCA

CN Tantalum, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidene)-, (T-4)-
 (CA INDEX NAME)



RN 68490-69-7 HCA

CN Tungsten, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidyne)-, (T-4)-
 (CA INDEX NAME)



IC ICM C07C009-00

ICS C07C006-10; C07C004-06

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 23, 29, 67, 78

IT 74-82-8, Methane, reactions

RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or

reagent); USES (Uses)

(in-situ hydrogen former; process for manuf. of alkanes from one species to another species using hydrogenolyzed metal catalysts)

IT 74-84-6P, Ethane, preparation 106-97-8P, Butane, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(process for manuf. of alkanes from one species to another species using hydrogenolyzed metal catalysts)

IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum 68490-69-7

RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (supported catalyst; process for manuf. of alkanes from one species to another species using hydrogenolyzed metal catalysts)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 4 OF 6 HCA COPYRIGHT 2008 ACS on STN

AN 140:17735 HCA Full-text

TI Process for manufacture of alkanes from one species to another species

IN Lefort, Laurent; Maunders, Barry; Sunley, Glenn

PA BP Lavera, Fr.; BP Chemicals Limited

SO Fr. Demande, 75 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	FR 2840605	A1	20031212	FR 2002-7065	20020610
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	WO 2003104173	A1	20031218	WO 2003-GB2439	20030604

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

AU 2003240074 A1 20031222 AU 2003-240074

200306

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PRAI FR 2002-7065 A 20020610 <--

WO 2003-GB2439 W 20030604 <--

AB In the process such as metathesis or transformation, an initial alkane is set to contact with a metal catalyst (e.g., supported tris(neopentyl)(neopentylidene)tantalum) which has been activated (hydrogenolyzed) by the contact with H or/and a hydrocarbyl radical where the H can be generated in situ. The initial alkanes can be selected among linear alkanes, branched alkanes and cycloalkanes substituted by at least a linear or branched chain alkane, and among the methane and of the mixts. of methane with one or more other initial alkanes.

IT 74-82-8, Methane, reactions

RL: RCT (Reactant); FACT (Reactant or reagent)

(methanolysis agent; process for manuf. of alkanes from one

species to another species using hydrogenolyzed metal catalysts)

RN 74-82-8 HCA

CN Methane (CA INDEX NAME)

CH₄

IT 74-84-0P, Ethane, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(process for manuf. of alkanes from one species to another

species using hydrogenolyzed metal catalysts)

RN 74-84-0 HCA

CN Ethane (CA INDEX NAME)

H₃C-CH₃

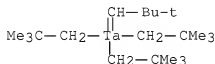
IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum

68490-69-7

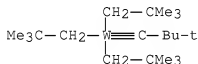
RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(supported catalyst; process for manuf. of alkanes from one

species to another species using hydrogenolyzed metal catalysts)
 RN 54294-45-0 HCA
 CN Tantalum, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidene)-, (T-4)-
 (CA INDEX NAME)



RN 68490-69-7 HCA
 CN Tungsten, tris(2,2-dimethylpropyl)(2,2-dimethylpropylidyne)-, (T-4)-
 (CA INDEX NAME)



IC ICM C07C006-10
 ICS C07C002-76; C07C004-06; C07C009-00
 CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 IT 74-82-8, Methane, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (methanolysis agent; process for manuf. of alkanes from one
 species to another species using hydrogenolyzed metal catalysts)
 IT 74-84-0P, Ethane, preparation 106-97-8P, Butane,
 preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (process for manuf. of alkanes from one species to another
 species using hydrogenolyzed metal catalysts)
 IT 54294-45-0, Tri(neopentyl)(neopentylidene)tantalum
 68490-69-7
 RL: CAT (Catalyst use); CPS (Chemical process); PEP (Physical,
 engineering or chemical process); PROC (Process); USES (Uses)
 (supported catalyst; process for manuf. of alkanes from one
 species to another species using hydrogenolyzed metal catalysts)
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN 111:235529 HCA Full-text
OREF 111:39113a,39116a
TI Dehydrocoupling of methane by supported organometallic complexes
AU Wilson, Robert B., Jr.; Chan, Yee Wai; Posin, Barry M.
CS Inorg. Org. Chem., Program SRI Int., Menlo Park, CA, 94025, USA
SO Preprints of Papers - American Chemical Society, Division of Fuel
Chemistry (1989), 34(4), 1378-85
CODEN: ACFPAI; ISSN: 0569-3772
DT Journal
LA English
AB The effects of reaction conditions and Ru catalyst clustering,
precursors, and supports on the oxidative coupling of CH₄ to C₂ and
C₆+ hydrocarbons were examd. Al₂O₃, MgO, and 5A and LZY 52 zeolites
were used as supports.
IT 97-93-8D, reaction products with ruthenium cluster compds.
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for oxidative coupling of methane, selectivity of)
RN 97-93-8 HCA
CN Aluminum, triethyl- (CA INDEX NAME)

Et
|
Et-Al-Et

IT 74-84-0P, Ethane, preparation
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in oxidative coupling of methane in presence of
ruthenium catalysts, selectivity of)
RN 74-84-0 HCA
CN Ethane (CA INDEX NAME)

H₃C-CH₃

IT 74-82-8, Methane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidative coupling of, in presence of ruthenium catalysts,
selectivity of)
RN 74-82-8 HCA
CN Methane (CA INDEX NAME)

CH₄

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 IT 97-93-8D, reaction products with ruthenium cluster compds.
 7440-18-8, Ruthenium, uses and miscellaneous 12568-51-3D, reaction
 products with triethylaluminum 33307-38-9 34438-91-0D, reaction
 products with triethylaluminum
 RL: CAT (Catalyst use); USES (Uses)
 (catalysts, for oxidative coupling of methane, selectivity of)
 IT 74-84-0P, Ethane, preparation 74-85-1P, Ethene,
 preparation
 RL: FORM (Formation, nonpreparative); PREP (Preparation)
 (formation of, in oxidative coupling of methane in presence of
 ruthenium catalysts, selectivity of)
 IT 74-82-8, Methane, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative coupling of, in presence of ruthenium catalysts,
 selectivity of)
 L33 ANSWER 6 OF 6 HCA COPYRIGHT 2008 ACS on STN
 AN 110:97517 HCA Full-text
 OREF 110:16097a,16100a
 TI Conversion of methane to higher hydrocarbons by supported
 organometallic complexes
 AU Wilson, Robert B., Jr.; Chan, Yee Wai
 CS Inorg. Organomet. Prog., SRI Int., Menlo Park, CA, 94025, USA
 SO Preprints of Papers - American Chemical Society, Division of Fuel
 Chemistry (1988), 33(3), 443-52
 CODEN: ACFPAI; ISSN: 0569-3772
 DT Journal
 LA English
 AB Ru-Et-CO complexes (contg. 1, 4, or 6 Ru atoms) on zeolites, Al2O3,
 or MgO were used to convert CH4 to hydrocarbons at 750°. A
 selectivity of ≤50% for higher hydrocarbons was obsd. for Al2O3-
 supported hexameric Ru complexes, while zeolite-supported Ru4
 complexes produced less coke than the other catalysts apparently due
 to the cluster being located inside the zeolite supercage.
 IT 97-93-8D, reaction products with ruthenium cluster compds.
 RL: CAT (Catalyst use); USES (Uses)
 (catalysts, supported, for conversion of methane to hydrocarbons)
 RN 97-93-8 HCA
 CN Aluminum, triethyl- (CA INDEX NAME)

Et

Et-Al-Et

IT 74-82-8, Methane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(conversion of, to hydrocarbons, supported ruthenium cluster
catalysts for)
RN 74-82-8 HCA
CN Methane (CA INDEX NAME)

CH₄

IT 74-84-0P, Ethane, preparation
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, from methane, in presence of supported ruthenium
cluster catalysts)
RN 74-84-0 HCA
CN Ethane (CA INDEX NAME)

H₃C-CH₃

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
IT 97-93-8D, reaction products with ruthenium cluster compds.
12568-51-3D, reaction products with triethylaluminum 33307-38-9
34438-91-0D, reaction products with triethylaluminum
RL: CAT (Catalyst use); USES (Uses)
(catalysts, supported, for conversion of methane to hydrocarbons)
IT 74-82-8, Methane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(conversion of, to hydrocarbons, supported ruthenium cluster
catalysts for)
IT 74-84-0P, Ethane, preparation 74-85-1P, Ethene,
preparation
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, from methane, in presence of supported ruthenium
cluster catalysts)